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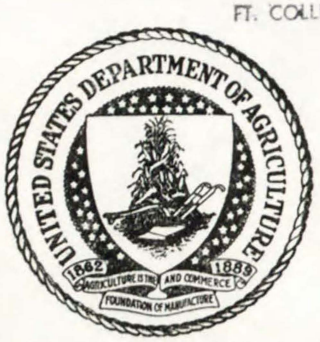

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SUBJECT MATTER INDEX

Technical Notes, Nos. 401 - 500

U. S. DEPARTMENT OF AGRICULTURE - FOREST SERVICE

St. Paul 1, Minnesota

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TECHNICAL NOTES
LAKE STATES FOREST EXPERIMENT STATION
U.S. DEPARTMENT OF AGRICULTURE · · · FOREST SERVICE
UNIVERSITY FARM ST. PAUL 1, MINNESOTA

No. 401

Scrub Aspen Control with Basal Sprays

By applying basal sprays during late June, July, and August, following full leaf development, scrub aspen trees have been killed without subsequent sprouting and suckering for four growing seasons. Aspen similarly treated during the dormant and early growing seasons suckered prolifically in the second year after spraying. The basal spray used was a 50/50 mixture of 2,4-D and 2,4,5-T in diesel oil (12 lbs. of acid per 100 gals. of oil). It was applied in soaking quantities to a height of two to three feet on the basal portion of the tree.

These tests were started in 1950 in northern Lower Michigan in connection with pine release studies. Beginning about May 1, groups of 20 aspen trees were treated with basal sprays every seven days until the middle of October. By the end of the first growing season after treatment, the tops of all treated aspen trees were dead, and no sprouts or suckers developed regardless of the season treated. However, at the end of the second growing season, suckers were found among the aspen trees which had been sprayed during the dormant and early growing season before full leaf development. The extent of suckering remained unchanged at the end of the third and fourth growing seasons, except for a few scattered aspen suckers among the trees treated during the fall months of late September and October.

Suckers which developed from the aspen basal-sprayed during the dormant and early growing seasons of 1950 averaged about five feet in height by late June 1953. By this time many of the treated aspen were either broken off or rapidly disintegrating.

Aspen cut and girdled with an axe during the winter, spring, summer, and fall months of the year sprouted and suckered rather prolifically regardless of the season treated, although the density and vigor of the suckers was somewhat lower from trees cut during the summer months after full leaf development.

From these tests in Lower Michigan it appears that aspen suckering can be controlled successfully when the basal portion of the tree is thoroughly wetted to a height of two or three feet with a 50/50 mixture of 2,4-D and 2,4,5-T esters in diesel oil (12 lbs. of acid per 100 gals. of oil) applied following full leaf development in late June, July, and August.

July 1953 JOHN L. AREND, Forester

MAINTAINED IN COOPERATION WITH THE UNIVERSITY OF MINNESOTA